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MICROWAVE PYROLYSIS APPARATUS FOR WASTE TIRES

Abstract of the Disclosure

A microwave distillation apparatus provides destructive distillation of whole waste tires. The apparatus includes a housing ^{including} ~~comprising~~ a plurality of vertically arranged chambers. A preheat chamber provides preheating of a whole waste tire received therein. An irradiation chamber, located below the preheat chamber and thermally coupled to the preheat chamber such that heat generated in the irradiation chamber creates heat convection currents in the preheat chamber, receives a preheated whole waste tire from the preheat chamber. A microwave energy supply supplies microwave energy to the irradiation chamber to provide destructive distillation of a tire received in that chamber. A cooling chamber, located below the irradiation chamber, receives by-products of the destructive distillation therefrom and provides delivery of the by-products from the housing.

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